

PROGRAM: Telecommunications Maintenance and Installation

**PROGRAM
CIP CODE:** 47.0100

DESCRIPTION: The Telecommunications Maintenance and Installation program is designed to prepare students to apply technical knowledge and skills to assemble, install, operate, maintain and repair one and two way communications equipment and systems, including television cable systems and mobile or stationary communication devices. An integrated approach of teaching and learning is provided as students enhance their technical knowledge and skills that are associated with functions within Telecommunications Maintenance and Installation occupations. In addition to the occupation related skills, students completing this program will develop advanced critical thinking, applied academics, interpersonal relations, life management, business, economic and leadership skills required for the 21st century workplace. The program uses a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience and the Career and Technical Student Organization, SkillsUSA.

RECOMMENDED PROGRAM SEQUENCE OF COURSES:

**Career
Preparation
Grades
10-12** The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated Telecommunications Maintenance and Installers standards are addressed in this instructional sequence.

47.0100.10 Telecommunications Maintenance and Installation Fundamentals: This course will introduce the basic components and principles involved in the assembly, operation, maintenance, repair, and installation of communications equipment and systems.

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47.0100.20 Telecommunications Maintenance and Installation I: This course offers the students the basics in diagnostic techniques, the use of testing equipment and the principles of mechanics, electricity and electronics as they relate to the repair and installation of communications systems.

-and-

47.0100.25 Telecommunications Maintenance and Installation II: This course offers the students advanced knowledge, skill and instruction in diagnostic techniques, the use of testing equipment and the principles of mechanics, electricity and electronics as they relate to the repair and installation of communications systems.

And program may elect to add:

47.0100.75 Telecommunications Maintenance and Installation - Internship: This course provides CTE students an opportunity to engage in learning through participation in a structured work experience that can be either paid or unpaid and does not necessarily require classroom instruction that involves the application of previously developed Telecommunications Maintenance and Installation knowledge and skills.

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47.0100.80 Telecommunications Maintenance and Installation - Cooperative Education: This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Telecommunications Maintenance and Installation program.

TEACHER CERTIFICATION REQUIREMENTS FOR THE TELECOMMUNICATIONS MAINTENANCE AND INSTALLATION PROGRAM

CAREER PREPARATION: The instructor must be CTE certified according to the following table:

Telecommunications Maintenance and Installation	CERTIFICATES	
	Types: (To Be Determined) Approved Areas: (To Be Determined)	Types: (To Be Determined) (To Be Determined)

Note:

- Telecommunications Maintenance and Installation, 47.0100.70 may be a part of the sequence and the teacher must hold a Cooperative Education Endorsement (CEN).
- Teacher/Coordinator 47.0100.75 is not required to have a Cooperative Education Endorsement (CEN).
- Teacher/Coordinator 47.0100.80 is required to have a Cooperative Education Endorsement (CEN).

CERTIFICATE ABBREVIATIONS FOR THE TELECOMMUNICATIONS MAINTENANCE AND INSTALLATION PROGRAM

Certificate Types (To Be Determined)	Approved Areas List (To Be Determined)
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